

**ABSTRACT**

A transmitter using a plurality of pulse signals having different pulse sequence times, a receiver for steadily demodulating pulse signals of only desirable wave, and a wireless system are disclosed. In the transmitter, a  
5 control signal generating circuit outputs a control signal for generating a plurality of pulse signals having different pulse sequence generating times, a pulse generating circuit generates a plurality of pulse signals by using the control signal. In the receiver, reception front end (104) receives the plurality of pulse signals having different pulse sequence generating times, delay circuit  
10 (101) delays at least one of reception front-end output signals (107a, 107b) supplied from the reception front-end by a given time, delay pulse composition circuit (102) combines delay signal (108) with reception front-end output signal (107b), so that the receiver steadily demodulates the pulse signals of only the desirable wave.